

CLAIMS

What is claimed is:

1 1. A method comprising:  
2 broadcasting a synchronization signal from a wireless  
3 access point device indicating a mode of operation and  
4 available network services; and  
5 establishing a connection between a non-authorized mobile  
6 device and the access point device.

1 2. The method of claim 1 further comprising:  
2 wirelessly transmitting a synchronization signal to indicate a  
3 mode of operation and available network services; receiving a  
4 request for connection establishment from the non-authorized  
5 mobile device;  
6 receiving a request for access to a selected network  
7 service, from among the available network services, from the  
8 non-authorized mobile device; and  
9 allowing the non-authorized mobile device access to the  
10 selected network service.

11 3. The method of claim 1 wherein the available network  
12 services includes free public network services.

1 4. The method of claim 1 wherein the available network  
2 services includes pay-per-use public network services.

1 5. The method of claim 4 further comprising:  
2 providing a form of payment for a pay-per-use network  
3 service.

1 6. The method of claim 5 wherein the form of payment is a  
2 credit card number.

1 7. The method of claim 5 wherein the form of payment is a  
2 prepaid payment number.

1 8. The method of claim 5 further comprising:  
2 providing a secure transmission of information between  
3 the non-authorized mobile device and the access point device.

1 9. The method of claim 5 further comprising:  
2 sending payment information from the non-authorized  
3 mobile device to the access point device wirelessly.

1 10. The method of claim 5 further comprising:  
2 validating the payment information provided by the non-  
3 authorized mobile device; and  
4 providing the validation results to the non-authorized  
5 mobile device.

1 11. The method of claim 10 further comprising:  
2 establishing a connection between the non-authorized  
3 mobile device to a selected network service only if payment  
4 validation successful.

1 12. The method of claim 11 further comprising:  
2 disconnecting the non-authorized mobile device from a  
3 selected network service, from among the available network  
4 services, if payment expires.

1 13. The method of claim 1 further comprising:  
2 performing data exchanges between the non-authorized  
3 mobile device and a selected network service, from among the  
4 available network services, through the access point.

1 14. The method of claim 1 further comprising:

2           disconnecting the non-authorized mobile device from the  
3 access point device to terminate access to the available  
4 network services.

1       15. The method of claim 1 wherein connection establishment  
2 uses any authentication procedure performed in accordance with  
3 the Electrical and Electronics Engineers (IEEE) Standard  
4 802.11 Specification or its supplements.

1       16. A machine-readable medium having one or more instructions  
2 for enabling a non-authorized user to wirelessly access a  
3 number of network services, which when executed by a  
4 processor, causes the processor to perform operations  
5 comprising:

6           wirelessly transmitting a synchronization signal  
7 indicating a mode of operation and available network services;

8           receiving a request for connection establishment from a  
9 non-authorized user;

10          establishing a connection with the non-authorized user;

11          receiving a request for access to a selected network  
12 service, from among the available network services, by the  
13 non-authorized user; and

14          providing the non-authorized user access to the selected  
15 network service.

1       17. The machine-readable medium of claim 16 further  
2 comprising:

3           requesting a form of payment from the non-authorized user  
4 for access to pay-per-use network services.

1       18. The machine-readable medium of claim 17 further  
2 comprising:

3           validating the payment information provided by the non-  
4 authorized user.

1 19. The method of claim 18 further comprising:  
 2 disconnecting the non-authorized mobile device from the  
 3 selected network service if payment expires.

1 20. The method of claim 16 further comprising:  
 2 performing data exchanges between the non-authorized user  
 3 and the selected network service.

1 21. An apparatus comprising:  
 2 a transceiver port for wirelessly communicating with  
 3 mobile devices;  
 4 a network communications port communicatively coupled to  
 5 the transceiver port, the network communications port for  
 6 coupling to a network; and  
 7 a control unit coupled to the transceiver port and the  
 8 network communications port, the control unit configured to  
 9 control access from the transceiver port to the network  
 10 communications port and provide at least two modes of  
 11 operation, a first mode of operation to provide authorized  
 12 mobile devices access to the network communications port, and  
 13 a second mode of operation to provide non-authorized mobile  
 14 devices access to the network communications port.

1 22. The apparatus of claim 21 wherein any one of the operation  
 2 modes can be dynamically enabled or disabled.

1 23. The apparatus of claim 21 wherein in the first mode of  
 2 operation a specific authentication process is requested from  
 3 the mobile devices to obtain full network access over the  
 4 network communications port and in the second mode of  
 5 operation no specific authentication process is requested from  
 6 the mobile devices to obtain certain network access over the  
 7 network communications port.

1 24. The apparatus of claim 21 wherein the second mode of  
2 operation allows the non-authorized mobile devices to obtain  
3 public network access through the network communication port.

1 25. The apparatus of claim 21 wherein the control unit is  
2 configured to provide secure services to both authorized and  
3 non-authorized mobile devices.

1 26. The apparatus of claim 21 wherein the control unit is  
2 configured to provide data exchange to both authorized and  
3 non-authorized mobile devices in accordance with the  
4 Electrical and Electronics Engineers (IEEE) 802.11 Standard.

1 27. The apparatus of claim 21 wherein the control unit is  
2 configured to provide a third mode of operation, the third  
3 mode of operation provides authorized mobile devices access to  
4 the network communications port and non-authorized mobile  
5 devices limited access to the network communications port  
6 simultaneously.

105011398